

Early Math Fluency CBM Probe: Number Identification

This introduction to the Number Identification probe provides information about the preparation, administration, and scoring of this Early Math CBM measure. Additionally, it offers brief guidelines for integrating this assessment into a school-wide 'Response-to-Intervention' model.

Number Identification: Description (Clarke & Shinn, 2004; Gersten, Jordan & Flojo, 2005)

The student is given a sheet containing rows of randomly generated numbers (e.g., ranging from 0 to 20). During a one-minute timed assessment, the student reads aloud as many numbers as possible while the examiner records any Number Identification errors.

Number Identification: Preparation

The following materials are needed to administer Number Identification (NID) Early Math CBM probes:

- Student and examiner copies of the NID assessment probe. For each probe, 2 student pages and one examiner page are available to print. The student pages may be put into clear page protectors (back to back) in order to be used with multiple students. The teacher should clearly write the student's name and the date of the assessment on each examiner copy (1 per student).
- A pencil, pen, or marker
- A stopwatch

Number Identification: Directions for Administration

1. The examiner sits with the student in a quiet area without distractions. The examiner sits at a table across from the student.
2. The examiner says to the student:

"The sheet on your desk has rows of numbers."

"When I say, 'start,' begin reading the numbers aloud. Start at the top of this page and read across the page [demonstrate by pointing]. Try to read each number. When you come to the end of a row, go to the next row. Are there any questions? [Pause] Start."

3. The examiner begins the stopwatch when the student reads the first number aloud. If the student hesitates on a number for 3 seconds or longer, the examiner says, "Go to the next one." (If necessary, the examiner points to the next number as a student prompt.)
4. The examiner marks each Number Identification error by marking a slash (/) through the incorrectly read number on the examiner form.
5. At the end of one minute, the examiner says, "Stop" and writes in a right-bracket symbol (]) on the examiner form from the point in the number series that the student had reached when the time expired. The examiner then collects the student Number Identification sheet.

Number Identification: Scoring Guidelines

Correct NID responses include:

- Numbers read correctly
- Numbers read incorrectly but corrected by the student within 3 seconds

Incorrect NID responses include:

- Numbers read incorrectly
- Numbers read correctly after hesitations of 3 seconds or longer
- Numbers skipped by the student

To calculate a Number Identification fluency score, the examiner:

1. counts up all numbers that the student attempted to read aloud and
2. subtracts the number of errors from the total of numbers attempted.
3. The resulting figure is the number of correct numbers identified.(NID fluency score).

Adjusted Score:

If a child stops, (or finishes the probe), before the minute is up; **note the number of seconds the child worked.**

Then use the formula below to “adjust” the child’s score:

$$\frac{\# \text{ correct}}{\# \text{ seconds}} = A$$

$$A \times 60 = \# \text{ answers correct per minute (adjusted test)}$$

For example:

Suzy got 5 correct and stopped after 30 seconds.

$$5 \div 30 = .16$$

$$.16 \times 60 = 9.996 \text{ which rounds to } 10$$

So Suzy got 10 correct numbers per minute.

We can now graph the **numbers per minute score.**

Use the Excel Graphing Program to keep track of student data for progress monitoring.